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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,461	09/25/2003	Ru-Shi Liu	2019-0221P	4564
2292	7590	08/10/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			HINES, ANNE M	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	

2879

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/669,461	Applicant(s) LIU ET AL.	
	Examiner Anne M. Hines	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not possible for the radiation source to be both an electron beam and plasma. Examiner has treated the claim on its merits assuming that claim 4 reads: wherein the radiation source comprises an electron beam or plasma.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "wherein the semiconductor-type phosphor is adjusted in weight ratio with respect to a packing material" is indefinite because the packing material is not disclosed in the specification. Examiner has treated the claim on its merits assuming that the packing material is a material (e.g. a resin) mixed with the phosphor.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al. (US Pat. No. 6,614,179).

Regarding claim 1, Shimizu discloses a method for manufacturing a white light source, the method including following steps: providing a radiation source (Column 23, lines 58-59); and providing a semiconductor-type phosphor with (Zn, Cd)S being a host matrix (Column 25, lines 14-17) with foreign ions added thereto as luminescence centers (Column 25, lines 14-17); wherein the radiation source emits light ranging from about 495nm (blue-green light) to 340nm (ultra-violet) (Column 23, lines 58-59).

Regarding claim 2, Shimizu further discloses wherein the foreign ions are Ag ions, Cu ions, Cl ions or a combination thereof, and preferably Ag ions with Cl ions (Column 25, lines 14-17).

Regarding claim 3, Shimizu further discloses wherein the radiation source is a light emitting diode (Column 24, lines 20-26).

Regarding claim 6, Shimizu further discloses wherein the semiconductor-type phosphor is adjusted in weight ratio with respect to a packing material (Column 15, lines 1-19).

Claims 1, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kajiwara (US Pat. No. 6,833,086).

Regarding claim 1, Kajiwara discloses a method for manufacturing a white light source, the method including following steps: providing a radiation source (Column 13, lines 38-42); and providing a semiconductor-type phosphor with (Zn, Cd)S being a

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host matrix (Column 10, lines 29-30) with foreign ions added thereto as luminescence centers (Column 10, lines 29-30); wherein the radiation source emits light ranging from about 495nm (blue-green light) to 340nm (ultra-violet) (Column 13, lines 38-42).

Regarding claim 4, Kajiwara further discloses wherein the radiation source comprises an electron beam or plasma (Column 12, lines 16-22; Column 13, lines 22-24).

Regarding claim 5, Kajiwara further discloses wherein the semiconductor-type phosphor is prepared by chemosynthesis, solid-gas sintering, direct reaction, or organic metal thermal decomposition (Column 12, lines 5-12).

Other Prior Art Cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamden-Smith et al.	US Pat. No. 6,645,398
Okajima et al.	US Pat. No. 5,700,591
Boerner et al.	US Pat. No. 6,165,631

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne M. Hines whose telephone number is (571) 272-2285. The examiner can normally be reached on Monday through Friday from 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anne M Hines *AMH*
Patent Examiner *08/08/05*
Art Unit 2879

Mary 8/8/05
MARICELI SANTIAGO
PRIMARY EXAMINER